F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

I. General

This portion of the project involves the installation of a new fire station pre-empt flashing traffic control signal with street lighting in conjunction with new roadway construction at the intersection of new Mid-field Cargo Access road and the Air-craft Rescue and Fire fighting Center Access Drive in Anne Arundel County. The Mid-field Cargo Access Road is assumed to run in a east-west direction.

II. Intersection Operation

This intersection is proposed to run in a flashing operation with Mid-field Cargo Access Road receiving the right-of-way during normal operation. The Aircraft Rescue and Fire Fighting Access Road approach shall be pre-empted by an emergency vehicles via opticom detection.

A Econolite ASC II eight (8) phase, full traffic actuated controller with intersection control monitor, battery back-up, housed in a pole mounted (size 5) cabinet shall be installed at this intersection.

III. Special Notes

1.) The following contact persons for District #5 are as follows:

Mr. Paul Armstrong
District Engineer
Phone # (410) 841-5450

Mr. Lawrence Elliott
Asst. District Engineer - Traffic
Phone # (410) 841-5450

Mr. Chuck George
Asst. District Engineer - Maintenance
Phone # (410) 841-5450

Mr. John Mays
Asst. District Engineer - Utility
Phone # (410) 841-5450

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone # (410) 787-7630

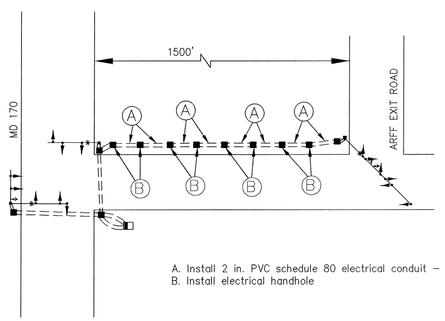
2.) Upon completion of this project, the contractor shall contact Mr. Robert Snyder of the MD-SHA at (410) 787-7635 to arrange for the telephone line installation. The contractor shall provide Mr. Snyder with the nearest street address, zip code and phone number.

3.) The contractor shall deliver the traffic signal controller and cabinet to the:

Maryland SHA
Signal Maintenance Shop
7491 Connelley Drive
Hanover, Maryland 21076

Controllers and cabinets shall be delivered at least 30 calender days prior to installation for wiring and rigging. Contact Mr Ed Rodenhizer at (410) 787-7650 at least 72 hours prior to delivery.

INTERCONNECT SKETCH
NOT TO SCALE



A. Install 2 in. PVC schedule 80 electrical conduit - trenched.
B. Install electrical handhole

TRAFFIC SIGNAL EQUIPMENT TO BE FURNISH AND INSTALLED BY THE CONTRACTOR.

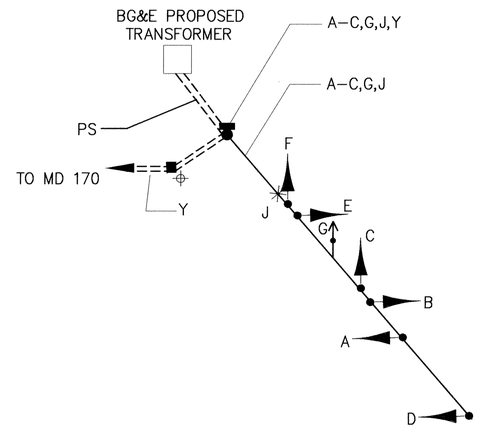
QUANTITY	UNITS	SECTION	DESCRIPTION
4	EA	814	Furnish and install 12 in. /8 in. 1 way 3 section (R,Y,Y) signal head - mast arm mount
2	EA	814	Furnish and install 12" one-way 3-section (R,Y,Y) optically programmed signal head - mast arm mount
1	EA	816	Furnish and install Econolite ASCII (size5) mounted controller & cabinet.
18	SF	813	Furnish and install sheet aluminum signs consisting of
	2	EA	W11-8 (36"x36")
	2	EA	W11-8(1) (72"x36")
	2	EA	W11-1(3) (36"x36")
	1	EA	W11-1(2) (36"x36")
	1	EA	W11-1B (36"x36")
	3	EA	M6-2 (21"x15")
	2	EA	D3-2 (VAR"x16")
	1	EA	R1-2 (36"x36"x36")
	1	EA	Guide Shield Assembly (30"x51")
	1	EA	Guide Shield Assembly (48"x75")
1	CY	205	Test Pit Excavation
42	LF	xxx	24 in. white permanent preformed pavement marking tape.
4.65	CY	801	Furnish and install concrete for signal foundation.
1	EA	804	Furnish and install ground rod - 3/4 in. diameter x 10 ft.
1600	LF	805	Furnish and install 2" schedule 80 rigid PVC conduit-trenched.
1	EA	806	Furnish and install 250 Watt high pressure sodium lamp and luminaire.
1	EA	807	Furnish and install control and distribution equipment.
20	LF	810	Furnish and install No. 6 AWG stranded bare copper ground wire.
100	LF	810	Furnish and install electrical cable 1-conductor No. 4 AWG-THHN/THWN.
100	LF	810	Furnish and install electrical cable-4 conductor (No. 20 AWG)
100	LF	810	Furnish and install electrical cable-5 conductor (No. 14 AWG)
2000	LF	810	Furnish and install electrical cable-7 conductor (No. 14 AWG)
50	LF	810	Furnish and install 2-conductor-Tray cable (NO. 12 AWG)
9	EA	811	Furnish and install electrical handhole.
160	LF	812	Furnish and install wood sign supports 4 in. x 6 in.
2	EA	XXX	Furnish and install opticom detector eye
1	EA	SP/829	Furnish and install 27 ft. steel pole with a 70 ft. mast arm. (Note: Four-2 in. x 90 in. anchor bolts.)
1	EA	818	Furnish and install 20 ft. lighting arm on signal structure.

PHASING SEQUENCE CHART

	1	2	3	4	5	6	
	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	
PHASE 2 & 6	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	→
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	R	R	←
PHASE 3 (PRE-EMPT 1)	R	R	R	R	FL/Y	FL/Y	↓
PHASE 3 CHANGE	R	R	R	R	Y	Y	↓
EMERGENCY FLASHER	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	→ ← ↓

R = RED
Y = YELLOW
FL = FLASHING

WIRING DIAGRAM



WIRING KEY

A-F - 5 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG) For Vehicle Signal Head

G - 4 CONDUCTOR ELECTRICAL CABLE (No. 20 AWG) For Opticom Eye

H - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)

J - 2 CONDUCTOR ELECTRICAL CABLE (No. 12 AWG) COPPER TYPE T/C

Y - 7 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG) FOR PRE-EMPTION

PS - POWER SERVICE

⊕ - GROUND ROD

DGT
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

REVISIONS	APPROVALS
	ASST. DIVISION CHIEF, TEDD
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MIDFIELD CARGO ACCESS ROAD @ ARFF EXIT ROAD
GENERAL INFORMATION SHEET

DATE 11 / / 97

DRAWN BY: R CICCHINI	F.A.P. NO.		PLAN SHEET NO.:	SHEET NO.
CHECK BY: D PETERS	S.H.A. NO.	BW316N83	TS3837	C14.5
SCALE: 1"=20'	COUNTY	ANNE ARUNDEL		